## **ABSTRACT**

The present invention provides a gastric electrical stimulation apparatus having (1) a pulse generator located outside of the body, (2) an external coil connecting to the pulse generator, (3) an internal coil which is implanted in the body and receives electricity from the external coil by transcutaneous energy transmission, (4) a waveform rectifier circuit connecting to the internal coil, and (5) electrodes which are positioned in contact with the gastric wall and are connecting to the waveform rectifier circuit. This gastric electrical stimulation apparatus imposes a less burden on users and is capable of providing long pulse stimulation.